Method and Apparatus for Aligning Operands for a Processor

ABSTRACT OF THE DISCLOSURE

A method for transparently presenting different size operands to be processed is provided. The method initiates with providing a first operand having a first bit-width. Then, a bit width of a second operand associated with a processor is determined. The second operand has a greater bit width than the first operand. Next, the first operand is transformed by aligning a least significant bit of the first operand to a lowest bit position of a transformed operand having a bit size equal to the second operand. Then, the bits of the transformed operand are sign extended and padded in a manner to allow carry propagation. Next, the transformed operand is transmitted to the processor. A method for shifting operands and a processor are also provided.

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